

# Sunny Mini Central

SMC 6000TL, SMC 7000TL and SMC 8000TL



Record breaking efficiency  
with over 98 %

Lowest specific price

Short return on investment

**OptiCool®:**  
Maximum power up to an  
ambient temperature of 40 °C  
due to dual compartment  
cooling system

**SMA grid guard® 2:**  
Automatic disconnection unit

**Electronic Solar Switch ESS®:**  
Integrated DC circuit breaker  
(optional)

For three phase systems

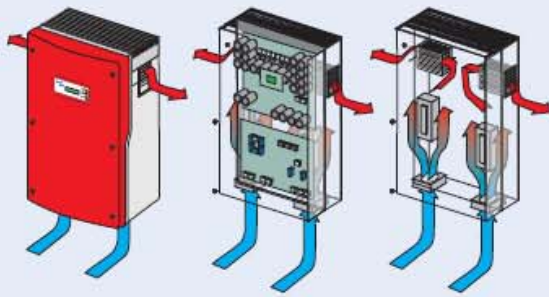
5 year SMA Warranty

The Sunny Mini Central family gives you even more: Over 98 % efficiency and the most attractive specific price result in the shortest return on invest time for solar inverters.

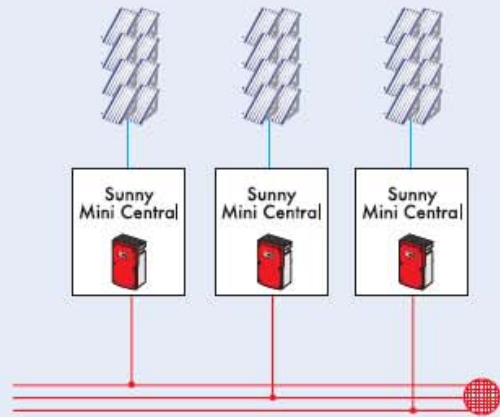
Different power classes with 8, 7 and 6 kW as well as the possibility of combinations of the different family members result in a simple design process for your system. And the Sunny Mini Central inverters are naturally equipped with all features from the market leader.

See for yourself, the technical data on the other page will convince you!

**More Informations:**  
[www.SMA.de/en/SMC8000TL](http://www.SMA.de/en/SMC8000TL)



OptiCool®: Dual chamber cooling system for full power up to an ambient temperature of 40 °C



Connection example of the Sunny Mini Central (Three phase connection)

## Technical Data

	SMC 6000TL	SMC 7000TL	SMC 8000TL
<b>Input Values</b>			
Recc. max. PV Power	6900 Wp *)	8000 Wp *)	9200 Wp *)
Max. DC Power	6200 W	7200 W	8250 W
DC Voltage Range	335 V - 700 V	335 V - 700 V	335 V - 700 V
Nominal Voltage (U <sub>PV,nom</sub> )	350 V	350 V	350 V
Max. MPP Voltage (U <sub>MPP,max</sub> )	500 V	500 V	500 V
Max. DC Voltage (U <sub>DC,max</sub> )	700 V	700 V	700 V
Max. Input Current (I <sub>PV,max</sub> )	19 A	22 A	25 A
DC Voltage Ripple (U <sub>pp</sub> )	< 10 %	< 10 %	< 10 %
Max. Number of Strings (Parallel)	4	4	4
DC Disconnection	Plug connector (MC or Tyco)	Plug connector (MC or Tyco)	Plug connector (MC or Tyco)
Thermally Monitored Varistors	yes	yes	yes
Ground Fault Current Monitoring	yes	yes	yes
Pole Confusion Protection	short circuit diode	short circuit diode	short circuit diode
<b>Output Values</b>			
AC Power, Continuous (P <sub>AC,max</sub> )	6000 W at 40°C	7000 W at 40°C	8000 W at 40°C
AC Power, Nominal (P <sub>AC,nom</sub> )	6000 W	7000 W	8000 W
Max. Output Current (I <sub>AC,max</sub> )	27 A	31 A	35 A
THD of AC Current	< 4 %	< 4 %	< 4 %
Nominal AC Voltage (U <sub>AC,nom</sub> )	220 V - 240 V	220 V - 240 V	220 V - 240 V
Nominal AC Frequency (f <sub>AC,nom</sub> )	50 Hz / 60 Hz **)	50 Hz / 60 Hz **)	50 Hz / 60 Hz **)
Power Factor (cos phi)	1	1	1
Short Circuit Proof	yes, current control	yes, current control	yes, current control
Grid Connection	AC screw terminal	AC screw terminal	AC screw terminal
<b>Efficiency</b>			
Max. Efficiency (eta max)	98 %	98 %	98 %
European Weighted Efficiency (eta euro)	97,7 %	97,7 %	97,7 %
<b>Power Circuit</b>			
Topology	H5® bridge (transformerless)	H5® bridge (transformerless)	H5® bridge (transformerless)
Utility Monitoring	SMA grid guard® 2	SMA grid guard® 2	SMA grid guard® 2
Number of Output Phases	1	1	1
<b>Enclosure</b>			
acc. to DIN EN 60529	IP65 (dust- and waterproof)	IP65 (dust- and waterproof)	IP65 (dust- and waterproof)
Cooling System	OptiCool®	OptiCool®	OptiCool®
Permissible Ambient Temperature	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
<b>Mechanical Data</b>			
Weight	approx. 31 kg	approx. 32 kg	approx. 33 kg
Width / Height / Depth in mm	468 / 613 / 242	468 / 613 / 242	468 / 613 / 242
<b>Features</b>			
Communication	Optional: RS232/RS485/radio	Optional: RS232/RS485/radio	Optional: RS232/RS485/radio
Display	Standard: 2-line display	Standard: 2-line display	Standard: 2-line display
Warranty	5 years (optional 10 years)	5 years (optional 10 years)	5 years (optional 10 years)
DC Disconnect	Optional: ESS®	Optional: ESS®	Optional: ESS®
Plant Monitoring	Compatible e.g. with Sunny Boy Control, Sunny Beam, Sunny WebBox and Sunny Portal	Compatible e.g. with Sunny Boy Control, Sunny Beam, Sunny WebBox and Sunny Portal	Compatible e.g. with Sunny Boy Control, Sunny Beam, Sunny WebBox and Sunny Portal

\*) for PV plants in Germany

\*\*) in preparation